REMARKS

Claims 1-3, 9-12, 15-19, 21, 23, 25-30, 32-39, 41-43, 46-47 are pending in the application and are presented for examination upon entry of the present amendment. Claims 4-8, 13-14, 20, 22, 24, 31, 40, 44 and 45 have been cancelled without prejudice. Claims 46-47 are new. Claims 1 and 19 are independent.

Interview of February 9, 2009

Applicants wish to thank the Examiner and the Examiner's SPE for the many courtesies extended in scheduling and conducting the telephonic interview. Present on the call were Examiners Colucci and Dorvil, Mses. Wingood and Gat-Falik, and Mr. Miloro. Applicants wish to point out that Shay Gabay was not present on the interview, although a PTOL-413 of February 13, 2009 indicates otherwise.

During the interview, a proposed version of claim 1 was discussed with reference to Tsuchikawa, Eilbacher, and Soundararajan. The proposed claim 1 was amended relative to the then-currently-pending claim 1 to deal with captured audio interactions particularly. The Examiners were of the opinion that, in light of the proposed amendments to claim 1, the prior art of record, Tsuchikawa in view of Eilbacher, would appear to be overcome.

Claim rejections, 35 U.S.C. § 112

The Office Action rejects claim 42 under § 112, ¶1, alleging that the Specification lacks support for "verifying that an agent requested a customer's permission to put the customer on hold." Applicants are respectfully traversing the § 112 rejection.

The Specification shows, for example within audio analyzer component 32 (FIG. 1), that there are sub-components having voice-analyzing capabilities. One such sub-component is word spotting component 34, which, as is shown variously through the Specification, performs word-recognition. Further, the Specification shows, for example at ¶0024, that an agent's adherence to a script can be determined. At least because of the disclosure of analyzer component 32 and the

description in ¶0024 of script-adherence, the Specification conveys to one skilled in the art that the present disclosure allows for verifying that an agent requested a customer's permission to put the customer on hold.

Applicants are requesting that the § 112 rejection of claim 42 be reconsidered and withdrawn.

Claim rejections, 35 U.S.C. § 103

The Office Action rejects claims 1-9. 11. 13. 16. 19-25, 31, 33-39, 41, 42, 44, and 45 under § 103 as being unpatentable over U.S. Pat. 5,748,775A to Tsuchikawa, et al. ("Tsuchikawa"), in view of U.S. Pat. App. Pub. No. 20030106072A1 of Soundararajan ("Soundararajan"), and further in view of U.S. Pat. 6,724887 B1 to Eilbacher ("Eilbacher").

Present claim 1 is directed to an apparatus for event-driven content analysis of an audio interaction captured in a call center, within a computerized system having a processing unit and a storage unit. As indicated by the Examiner in the interview summary, Tsuchikawa in view of Eilbacher does not teach audio and minimalization of analysis time.

Present claim 1 provides a pivot spot defining component for marking a time position in the audio interaction, which indicates the occurrence of a pre-defined event or data item.

Tsuchikawa does not disclose audio and audio analysis but rather the processing of a sequence of images. Thus Tsuchikawa does not and cannot disclose or suggest identifying a **time position** in an **audio** interaction. Although Tsuchikawa mentions temporal changes between frames (col. 5 ll. 18-26), Tsuchikawa does not disclose or suggest identification of a frame at a particular time position within the sequence. Rather, Tsuchikawa describes detecting moving objects **within all frames** in the sequence. Thus, Tsuchikawa does not identify a particular image within the sequence of images, so no pivot spot being a time position is identified.

Soundararajan relates to a multimedia storage and control apparatus, and does not teach or suggest **automatically** identifying a time location in the stream according to an event. In Soundararajan, a user can indicate a program to store, but Soundararajan does not disclose or suggest the identification of a pivot spot, automatically or otherwise.

Eilbacher does not disclose or suggest identifying a particular time location within the interaction. On the contrary, Eilbacher teaches analyzing interactions **as a whole**, see for example col. 10 line 17: "these types of recordings allow for evaluating of the *full customer experience* during the interaction." (emphasis supplied). Eilbacher is recording and evaluating full interactions only, cradle-to-grave, and does not teach or suggest setting a pivot spot, which would be meaningless in such a recording scheme.

Claim 1 further provides a first analysis component, and a region of interest defining component. The region of interest defining component defines an initial region of interest which contains the pivot spot, by determining the time limits of the initial region of interest. The component then activates a first analysis component for dynamically reducing the initial region of interest to obtain the region of interest.

Tsuchikawa does not handle audio interactions, and thus cannot teach identifying time limits of a segment of an audio interaction. Further, Tsuchikawa analyzes all frames in the image sequence, so Tsuchikawa does not teach identifying the time limits of a segment of the audio interaction, or any other sequence for that matter. Clearly Tsuchikawa cannot teach analyzing the identified segment by the first analysis component.

Also, no combination of Soundararajan and Eilbacher discloses determining an initial region of interest of an interaction, and analyzing this initial region of interest in order to reduce the initial segment's length and obtain a region of interest. Soundararajan teaches multimedia storage and control, and not analyzing the full or part of the multimedia. Eilbacher, which if anything teaches analyzing interactions as a whole, does not teach or suggest determining an initial region of interest

and a region of interest, and only an analysis to be performed on the region of interest, as required by claim 1.

Present claim 1 further provides a second, more resource-intense, analysis component for analyzing the region of interest. That is, a more resource-intense analysis is applied only after a reduction has been effected of an initial region of interest to a region of interest.

Neither Tsuchikawa nor Soundararajan discloses a second analysis component, let alone a second analysis component which is used on a reduced segment of the interaction, and which consumes more resources.

Eilbacher does not analyze parts of interactions, and also does not employ analysis components according to their relative resource consumption. Thus, Eilbacher cannot suggest using the more resource consuming analysis component on smaller segments of the interaction, and the less resource consuming ones on larger segments.

Thus, Tsuchikawa, Soundararajan and Eilbacher, either alone or in combination do not disclose claim 1. Reconsideration and withdrawal of the 103 rejection of claim 1 are respectfully requested.

Claims 2, 3, 9, 11, 16, 34, 36 and 38 depend from claim 1 and, for at least the reason of such dependence, are also patentable over the cited combination of art. Further, these dependent claims contain additional features absent from the prior art of record. For example:

Claim 11 requires that the first or the second analysis components be a screen event analyzer component. Screen events relate to events occurring on the screen of the agent, see for example par. 10:

"Screen events are based entirely on what takes place on an agent's display screen. Screen events may be used as triggers to other actions whenever an event of choice takes

place. Interactions are tagged with the event, enabling ready search, retrieval and evaluation of the calls. One non-limiting example of a screen event analysis involves the capturing of a field displayed on the agent's screen that indicates the change of status of a user account. For example, when the account status changes from 'Active' to 'Inactive' an event is generated and recorded to a database."

Tsuchikawa, however, relates to the images being processed, which may be presented on a computer screen. Tsuchikawa does not relate to screen events as information additional to the data being processed or as indicators to identifying time locations within the sequence.

The same arguments as for claim 1 are also applicable towards claim 19. Tsuchikawa, the primary reference, does not relate to analyzing audio interactions.

None of the references discloses determining a pivot spot as a time position in an interaction, determining the time limits of an initial region of interest of the interaction, performing first analysis in order to reduce dynamically the time limits of the initial region of interest to obtain the region of interest; and performing a second, more resource-intense, analysis on the region of interest.

Claims 21, 23, 25, 33, 35, 37, 39, 41, and 42 depend from claim 19 and are also allowable for the reasons set forth above with respect to claims 1 and 19 addressed above.

The Office Action rejects claims 10, 14, 15, 17, 18, 26, 30 and 32 under § 103 as being unpatentable over Tsuchikawa, in view of Soundararajan, and further in view of Eilbacher, and further in view of U.S. Pat. 6,917,610 to Kung, et al. ("Kung").

The Office Action introduces Kung for the proposition that Kung teaches an activity log GUI, and Internet Protocol connectivity from a residential gateway to the Internet. Assuming *arguendo* that Kung so teaches, nevertheless Kung does not operate to overcome the several

inabilities of Tsuchikawa, Soundararajan, and Eilbacher to disclose or suggest the independent claims 1 and 19. Thus claims 10, 15, 17, 18, 26, 30 and 32 depend from claims 1 and 19 that are allowable, and are, at least by virtue of such dependence, also patentable over the cited art.

In addition, dependent claim 10 in particular relates to the first or the second analysis components being a computer telephony interface (CTI) events analyzer component, which is not disclosed by any of the cited documents. CTI events are generated by a computer-telephony-integration which is a system used for example in call centers, in which the calls are received at a central point and are dispatched with identifying details to agents. Kung relates to guaranteeing voice, data and video communication reliability and security to users for an integrated telephone, television and data network. Kung does not relate to call centers or contact centers, and therefore does not and can not suggest the usage of a CTI event analyzer.

Claim 17 requires that the interaction be associated with an at least one computer telephony integration event occurring during the interaction. Thus, claim 17 is allowable at least for the reasons set above for claims 1 and 10.

The Office Action rejects claims 12 and 27-29 under § 103 as being unpatentable over Tsuchikawa, in view of Soundararajan, and further in view of Eilbacher and further in view of U.S. Pat. 6332,143 B1 to Chase ("Chase").

In forming the § 103 rejection, the Office Action acknowledges that Tsuchikawa in view of Soundararajan and Eilbacher fails to disclose the audio analyzer component of claim 4, and introduces Chase for the proposition that Chase provides: an emotion analysis component; a talk analyzer component; and a word-spotting component. Even assuming *arguendo* that Chase so discloses, nevertheless Chase is not operative to overcome the inabilities of Tsuchikawa, Soundararajan, and Eilbacher to render the independent claims unpatentable. Claims 12 and 27-29 depend from claim 1 or claim 19 and are also allowable for the reasons set forth above with respect to claim 1 addressed above.

Claim 40 is rejected under § 103 over Tsuchikawa in view of Soundararajan, Eilbacher, and U.S. 6,724,887 to Ronca ("Ronca"). Claim 40 is cancelled, which renders this rejection moot.

The Office Action rejects claim 43 as being unpatentable over Tsuchikawa, in view of Soundararajan, and further in view of Eilbacher and further in view of U.S. Pat. 5,918213 A to Bernard ("Bernard"). In forming the section 103 rejection of claim 43, the Office Action proffers Bernard for the proposition that Bernard teaches, *inter alia*, offering of promotional items to a customer based on the customer's calling history, and the deletion of items from a customer's virtual shopping cart. Even assuming *arguendo* that Bernard so discloses, nevertheless Bernard is not operative to overcome the inabilities of Tsuchikawa, Soundararajan, and Eilbacher to render the independent claims unpatentable, as previously discussed.

Claim 43 depends from claim 19 that is patentable, as described above, over Tsuchikawa, Soundararajan, and Eilbacher. For at least the reason of such dependence, claim 43 remains patentable over the cited combination of Tsuchikawa, Soundararajan, Eilbacher, and Bernard. Applicants are respectfully requesting that the section 103 rejection of claim 43 be reconsidered and withdrawn.

Applicants submit that the application is now in condition for allowance. Passage of the claims to allowance is respectfully requested.

Respectfully submitted,

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Date

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